REPLY

To: Examiner of the Patent Office

1. Identification of the International Application

                    PCT/JP2005/003824

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4. Date of Notification: 26.04.2005

5. Subject Matter of Reply: as per attached

6. List of Attached Document:

(1) Response to Written Opinion of the International Searching
Authority: 5 pages

Response to Written Opinion of the International Searching Authority

REMARKS

For the convenience of the International Preliminary Examining Authority (IPEA), the following remarks will refer to the Written Opinion of the ISA, and will be presented with the same numbering as the Written Opinion.

V. Reasoned statement with regard to novelty, inventive step or industrial applicability

The Written Opinion of the ISA asserts that claims 1-3, 7-9 and 13-15 lack novelty in view of document D1 to Matsushita Graphic Communication Systems, Inc. The Opinion further asserts that claims 4, 10, and 16 lack an inventive step in view of a combination of D1 and D2 to Canon Kabushiki Kaisha. Applicant submits that the claims meet the requirements of novelty and inventive step for at least the reasons discussed below.

Independent claim 1 recites, among other things, "an assigning unit for assigning one of said plurality of code converting units to a processing request from one of said plurality of request-source task units having a high priority and, if there is an idle code converting unit among the plurality of code converting units, assigning the idle code converting unit to a

processing request from one of said plurality of request-source task units having a low priority".

D1 relates to an image communication apparatus for sending same images to a plurality of Group 3 circuits (#1 to #N) at a time. The image communication apparatus includes a single compression/expansion device for the plurality of Group 3 circuits. Since the compression/expansion device is configured to process data at extremely high-speed, data processing for the plurality of Group 3 circuits in required time is possible. Furthermore, D1 discloses the priority of each of the Group 3 circuits is preliminarily determined (at paragraph 0025). Note that, this priority merely sets the processing order for the compression/expansion device.

D2 relates to a data processing apparatus that is capable of executing multiple processes at high speed. The data processing apparatus includes a software processor for implementing prescribed data processing by software and a hardware processor for implementing the prescribed data processing by hardware. If data processing has been requested, the time it takes the hardware processor to execute this data processing is acquired using test data. If the time required for processing is less than a predetermined time, the hardware processor is selected to execute processing by hardware. If the time required for processing is equal to or greater than the predetermined time,

the software processor is selected to execute processing by software.

However, nothing has been found in D1 and D2 that would teach or suggest "an assigning unit for assigning one of said plurality of code converting units to a processing request from one of said plurality of request-source task units having a high priority and, if there is an idle code converting unit among the plurality of code converting units, assigning the idle code converting unit to a processing request from one of said plurality of request-source task units having a low priority" as recited in claim 1. Accordingly, independent claim 1 and the claims that depend therefrom meet the requirements of patentability for at least these reasons. Independent claims 7 and 13 and the claims that depend therefrom are patentable for at least substantially the same reasons.

VIII.   Certain observations on the international application

The Written Opinion asserts that the claims 5, 6, 11, 12 and 17 are not supported by the description.

In one embodiment, a group A includes a scanner 301 and a printer 302. With reference to Fig. 4, data to be processed is sent to the hardware-implemented code processing unit 209 via the software-implemented code processing unit 310 with regard to the

functions included in this group, and the data is processed at high speed (see, at page 10, line 11 to page 11, line 12)..

Further, if a request for image reading by the scanner 301 has been issued, for example, the read data is delivered to the hardware-implemented code processing unit 209 via the code processing unit 310a having one-to-one correspondence to the scanner 301, the prescribed code processing is executed and the data is stored in the DRAM 204 (see, at page 15, line 20 to page 16, line 2).

Thus, "a second unit group processed by said hardware-implemented code converting units via said software-implemented code converting units" recited in claims 5, 11 and 17 is fully supported by the description.

On the other hand, a group B includes the functions of FAX reception 303 and IFAX reception 304. As for this group, since it is unnecessary for the processing itself to be speeded up, use of the hardware-implemented code processing unit 209 is not scheduled (see, at page 11, line 13 to page 12, line 8).

Further, for example, assume that a FAX receive request has been received. In one embodiment, the code processing unit 310d has been fixedly assigned (in one-to-one correspondence) to a FAX receive request. Consequently, the code-processing acquisition determination unit 309 delivers the receive data to the code processing unit 310c immediately. Then the JBIG data is generated from the receive data. This processing is brought to a conclusion

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by the software-implemented code processing unit (see, at page 15, lines 1-19).

Thus, "a first unit group processed by said software-implemented code converting units" recited in claims 5, 11 and 17 is fully supported by the description.

As discussed above, the descriptin provides adequate support for claims 5, 6, 11, 12 and 17.

CONCLUSION

Having addressed each of the points raised in the Written Opinion of the ISA, the Applicant respectfully requests issuance of a favorable International Preliminary Examination Report in due course.